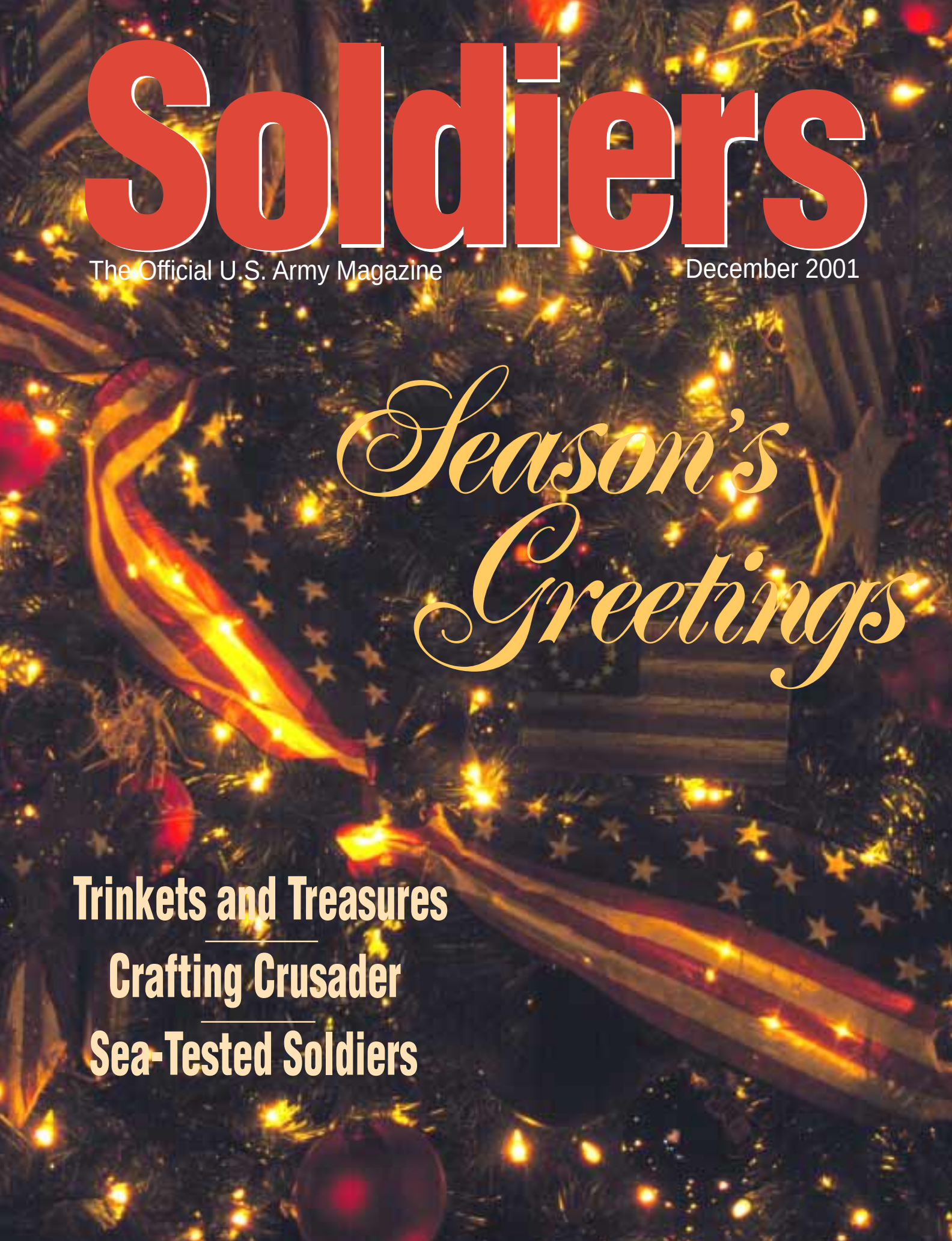
Soldiers

The Official U.S. Army Magazine

December 2001



Season's Greetings

Trinkets and Treasures

Crafting Crusader

Sea-Tested Soldiers

Army Transforming America

Better Living Through Chemicals

COTTON had powered the economy of the American South since before the founding of the republic. Cotton fiber was important to America's fabric industry and, with tobacco, was the South's largest export to foreign markets. But in the 1920s cotton-destroying insects that had invaded from Mexico seriously threatened this vital cash crop. Each year from the time of their unwelcome arrival, the insects spoiled millions of dollars worth of cotton. In desperation, the U.S. government called upon the Army's Chemical Warfare Service to devise methods for exterminating the boll weevil.

The CWS tested many of their known chemical warfare agents on the boll weevil and the cotton plant. The experiments found that some of the agents killed the weevils but also injured the plants. Other agents were found to have no effect. Despite its efforts, the CWS did not end boll weevil infestation. But in the years that followed, the CWS experiments led agriculture officials and public health authorities to other approaches for attacking boll weevils and other insects.

Another invader came by sea — aboard the large number of ships docking in U.S. ports. Many carried insects and other agents of disease, and the CWS helped to develop ways to fumigate these ships so that they could not spread disease to the United States. Even today, the importance of the CWS's labors is evident by the continuing danger to public health and American agriculture posed by insects that may migrate in shipments of foreign produce.

In pre-World War II America, taking on these difficult but necessary civilian projects demonstrated the value of the CWS to society and clearly showed that the CWS did far more than prepare the Army for the horrors of war. In an era when there was a strong push to cut military spending and isolate the nation from foreign affairs, the Army's peacetime efforts through the CWS helped justify its existence in the eyes of America's taxpayers. And it allowed the CWS to help protect agricultural exports while assuring American consumers that the foods arriving from overseas were safe to eat.
— CPT Patrick Swan

Army Transforming America

Engineering a Modern Nation

IS it a paradox that a force organized for national defense should also be responsible for some of the greatest civil works in America's history? Not when you see that as the Army protected the nation's expanding frontiers, its engineers were busy surveying the transportation routes, digging the canals and building the bridges that made that expansion possible. Over time, the Army has also erected some of the nation's most important public buildings, helped contain the flow of its mightiest rivers and provided an infrastructure that helped shape America's economic future.

In the early 19th century, for instance, the Army helped build the Chesapeake and Ohio Canal; extended the Cumberland Road westward; and contracted to clear impediments to navigation on the Ohio and Mississippi Rivers. In 1827 an Army Engineer officer, George Whistler, supervised construction of the Baltimore and Ohio Railroad, a direct competitor to the C&O Canal. Through 1855, virtually every railroad built in the United States depended in some measure on military surveys.

Army engineers later aided the nation's capital. In the mid-1850s, LT Montgomery C. Meigs designed an aqueduct system that has supplied drinking water to Washington, D.C., for generations. LTC Thomas L. Casey lent his expertise to completing the Washington Monument. Soldiers assembled numerous bridges spanning the Potomac River and carved out the George Washington Memorial Highway linking the District with Mount Vernon, Va.

The Army's assistance to the Panama Canal Commission in the early 1900s helped fundamentally improve world trade patterns. COL George W. Goethal oversaw this construction task that moved almost 267 million cubic yards of earth to link the Pacific and Atlantic oceans. Back home, Army engineers constructed lighthouses to ease navigation by coastal and oceangoing vessels. Their many contributions culminated with the American portion of the St. Lawrence Seaway, which unites the industrial potential of the Great Lakes region with the maritime commerce of the world.

Through levees and dams, Army engineers tame unruly rivers, thereby preventing billions of dollars of flood damage. The dams are especially useful, providing flood control, irrigation, navigation, water supply and recreation to millions of Americans. In addition, by 1975 such Corps of Engineers projects produced 24 percent of the nation's total hydroelectric power. The list of public works completed by Army engineers goes on and on and on — to the point that it's hard to imagine how America would look today without them. — *CPT Patrick Swan*